

CLAIMS

1. Process for the production of holders for vacuum test tubes, comprising a cylindrical casing (C), designed to house said vacuum test tube for blood sampling, provided with a needle (A) partially housed in said casing (C), with the inner section (A3) of the needle (A) generically coaxial with the casing (C), characterised in that it comprises:

- the production of the whole casing (C), preferably by moulding of thermoplastic material, with the hole suitable for housing the needle (A) on the front wall (C2) and with support wall or lower connection wall (C4) generically triangular in shape and having one side adhering to the front wall (C2) between said hole and the outer cylindrical surface of the casing (C) and one lower side aligned with said cylindrical wall of the casing (C);

- the insertion of the needle (A) straight, with the angle of the tip (A11) facing upwards, i.e. with oblique cut, into said hole in the end wall (C2) of the casing (C) and the fixing of said needle (A) in correspondence with the front wall (C2), in such a way as to house the inner part (A3) of the needle (A) inside the casing (C);

- a first bending of the needle (A) to slant it with respect to the axis of the casing (C) and make it adhere to the slanting side of the connection wall (C4);

- a further bending of the outer part (A1) of the needle (A) to align the end section (A1) of the needle (A) with the outer surface of the casing (C);

- the fixing of the needle (A) to the connection wall (C4), preferably on the end of said wall (C4) opposite the casing (C).

2. Holder to be used with interchangeable vacuum test tubes for taking blood samples, characterized in that it comprises a casing (C), generically

cylindrical with a closing wall (C2) at one end, provided with a needle (A) bent in at least three parts, of which the two end parts (A1, A3) are parallel, not lying on the same axis, and the intermediate part (A2), connecting said two parts (A1, A3), is external to said casing (C) and is slanting, and
5 wherein said needle (A) is applied to the end wall (C2) of the casing (C), so that an end part (A3) of the needle (A) is inside the casing (C) and is coaxial with it, and wherein the other end part (A1) of the needle is outside the casing (C) and generically aligned with the outer surface of the casing (C), and wherein said casing (C) is provided on its end wall (C2) with a wall or
10 wall (C4) designed to house the intermediate section (A2) of the needle (A) and to connect it with the casing (C) and provides a lower sliding surface for the holder (C) during the introduction of the needle (A).

3. Holder for interchangeable vacuum test tubes for taking blood samples, characterized in that it comprises a casing (C), generically
15 cylindrical with a closing wall (C2) at one end, provided with a needle (A) bent in two parts (A1a, A3a), and wherein said needle (A) is applied to said end wall (C2) of the casing (C), so that a part (A3a) of the needle (A) is inside the casing (C) and is coaxial with it, and wherein the other part (A1a) of the needle (A) is outside the casing (C) and slanting with respect to the
20 casing (C), and wherein said casing (C) is provided on its end wall (C2) with a connection wall (C4) designed to house the outer part (A1a) of the needle (A) and to connect it with the casing (C) and provides a lower sliding surface for the holder (C) during the introduction of the needle (A).

4. Holder for interchangeable vacuum test tubes for taking blood
25 samples according to the previous claims, characterized in that the connection wall (C4) of the casing is provided with a semicircular seat suitable for housing and fixing the needle (A).

5. Holder for interchangeable vacuum test tubes for taking blood

samples according to the previous claims, characterized in that the outer tip (A1) of the needle (A) has its angled or slanting side (A11) facing upwards.

5 6. Holder for interchangeable vacuum test tubes for taking blood samples according to the previous claims, characterized in that it is provided with at least one cap (T1) that can be applied to protect and cover the tip (A11) of the needle (A) (bent once).

10 7. Holder for interchangeable vacuum test tubes for taking blood samples according to the previous claims, characterized in that the surface of the casing (C) bears a colour and/or wording indicating the international code of the needle gauge.